IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (previously presented) A moving image processing device, comprising:

an information collecting unit collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding, and for also collecting second information about a correlation with a preceding/succeeding frame without decoding an image for each frame;

an evaluation function calculating unit calculating a value of an evaluation function which includes the first and the second information collected by said information collecting means as parameters only for a frame within a frame group which satisfies a condition that a forward prediction motion vector and a backward prediction motion vector in consecutive frames are small; and

a scene change determining unit determining a scene change by making a comparison between the value of the evaluation function, which is calculated by said evaluation function calculating unit, and a threshold value.

2. (previously presented) The moving image processing device according to claim 1, wherein:

said information collecting unit collects a scene change interval; and

said evaluation function calculating unit calculates the value of the evaluation function which includes the first and the second information, and the scene change interval as parameters.

3. (previously presented) The moving image processing device according to claim 2, further comprising

a scene change information storing unit storing the first and the second information, and the scene change interval as scene change information.

4. (previously presented) The moving image processing device according to claim 3, wherein

said evaluation function calculating unit calculates the value of the evaluation function by using the scene change information read from said scene change information storing unit; and

said scene change determining unit determines a scene change by making a comparison between the calculated value of the evaluation function and a threshold value.

5. (previously presented) The moving image processing device according to claim 1, wherein said information collecting unit collects the first information about a motion vector for each frame from first header information, which is added in units of frames of the compressed moving image data, and second header information, which is added in units of constituent elements of the frame, without decoding an image of the frame.

6. (previously presented) The moving image processing device according to claim 1, wherein said information collecting unit collects the second information about a correlation with a frame preceding/succeeding each frame from first header information, which is added in units of frames of the compressed moving image data, and second header information, which is added in units of constituent elements of the frame, without decoding an image of the frame.

7. (original) The moving image processing device according to claim 1, wherein the evaluation function is a function into which parameters are linearly combined with coefficients that are respectively assigned to the parameters.

8. (currently amended) A moving image processing device according to claim 1, wherein, comprising:

information collecting ~~means~~unit for collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding, and for also collecting second information about a correlation with a preceding/succeeding frame without decoding an image for each frame;

evaluation function calculating ~~means~~unit for calculating a value of an evaluation function which includes the first and the second information collected by said information collecting ~~means~~unit as parameters; and

scene change determining ~~means~~unit for determining a scene change by making a comparison between the value of the evaluation function, which is calculated by said evaluation function calculating ~~means~~unit, and a threshold value; and

said information collecting ~~means~~unit collects the number of bidirectionally predicted regions having both a forward prediction motion vector and a backward prediction motion vector for each frame, and outputs the first and the second information to said evaluation function calculating ~~means~~unit as parameters only for a frame within a frame group which satisfies a condition that the numbers of bidirectionally predicted regions in consecutive frames are small.

9. (previously presented) The moving image processing device according to claim 1, wherein said information collecting unit outputs the number of bidirectionally predicted regions having both a forward prediction motion vector and a backward prediction motion vector in each frame within a frame group to said evaluation function calculating unit as a parameter of the evaluation function.

10. (original) The moving image processing device according to claim 8, wherein said information collecting means collects an appearance interval of a frame that becomes a scene change within a frame group which satisfies a condition that the number of bidirectionally predicted regions in consecutive frames are small, and outputs the appearance interval of the frame to said evaluation function calculating means as a parameter of the evaluation function.

11. (original) The moving image processing device according to claim 10, further comprising:

scene change information storing means for storing, as scene change information, the first and the second information of a frame within a frame group which satisfies a condition that the number of bidirecitonally predicted regions in consecutive frames are small, and the appearance interval of the frame which becomes a scene change.

12. (original) The moving image processing device according to claim 11, wherein:

said evaluation function calculating means calculates the value of the evaluation function by using the scene change information read from said scene change information storing means; and

said scene change determining means determines a scene change by making a comparison between the calculated value of the evaluation function and a threshold value.

13. (original) The moving image processing device according to claim 1, wherein the first information is the number and magnitudes of motion vectors, whereas the second information is a square measure of a region having a low correlation with a preceding/succeeding frame.

14. (original) The moving image processing device according to claim 1, wherein the evaluation function is a function whose parameters are determined according to an appearance cycle of an intra-frame encoded frame or a forward predicted frame in the encoded moving image data.

15. (previously presented) A moving image processing method, comprising:

collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding;

collecting second information about a correlation with a preceding/succeeding frame without decoding an image of each frame;

calculating a value of an evaluation function which includes the first and the second information as parameters only for a frame within a frame group which satisfies a condition that a forward prediction motion vector and a backward prediction motion vector in consecutive frames are small; and

determining a scene change by making a comparison between the calculated value of the evaluation function and a threshold value.

16. (previously presented) The moving image processing method according to claim 15, further comprising:

collecting a scene change interval, and

wherein the evaluation function which includes the scene change interval as a parameter is calculated in the calculating.

17. (previously presented) The moving image processing method according to claim 15, wherein the first information about a motion vector for each frame is collected from first header information, which is added in units of frames of the compressed moving image data, and second header information, which is added in units of constituent elements of the frame, without decoding an image of the frame in the collecting first information.

18. (previously presented) The moving image processing method according to claim 15, wherein the second information about a correlation with a frame preceding/succeeding each frame is collected from first header information, which is added in units of frames of the compressed moving image data, and second header information, which is added in units of constituent elements of the frame, without decoding an image of the frame in the collecting second information.

19. (original) A moving image processing method, comprising:

collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding;

collecting second information about a correlation with a preceding/succeeding frame without decoding an image of each frame;

calculating a value of an evaluation function which includes the first and the second information as parameters;

determining a scene change by making a comparison between the calculated value of the evaluation function and a threshold value; and

collecting the number of bidirectionally predicted regions having both a forward prediction motion vector and a backward prediction motion vector, and

wherein the value of the evaluation function is calculated only for a frame within a frame group which satisfies a condition that the numbers of bidirectionally predicted regions in consecutive frames are small in the calculating.

20. (previously presented) The moving image processing method according to claim 19, wherein the evaluation function calculated in the calculating includes, as a parameter, the number of bidirectionally predicted regions having both a forward prediction motion vector and a backward prediction motion vector in each frame within the frame group.

21. (previously presented) The moving image processing method according to claim 19, further comprising:

collecting an appearance interval of a frame that becomes a scene change within a frame group which satisfies a condition that the numbers of bidirectionally predicted regions in consecutive frames are small, and

wherein the evaluation function calculated in the calculating includes the appearance interval of the frame as a parameter.

22. (original) The moving image processing method according to claim 15, wherein the first information is the number and magnitudes of motion vectors, whereas the second information is a square measure of a region having a low correlation with a preceding/succeeding frame.

23. (previously presented) A computer-readable storage medium on which is recorded a program for causing a computer to execute a process, said process comprising:

collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding;

collecting second information about a correlation with a preceding/succeeding frame without decoding an image for each frame;

calculating a value of an evaluation function which includes the first and the second information as parameters only for a frame within a frame group which satisfies a condition that a forward prediction motion vector and a backward prediction motion vector in consecutive frames are small; and

determining a scene change by making a comparison between the calculated value of the evaluation function and a threshold value.

24. (previously presented) A moving image processing device, comprising:

information collecting means for collecting first information about a motion vector for each frame from moving image data which is compressed with inter-frame prediction encoding, and for collecting second information about a correlation with a preceding/succeeding frame without decoding an image for each frame;

evaluation function calculating means for calculating a value of an evaluation function which includes the first and the second information collected by said information collecting means as parameters only for a frame within a frame group which satisfies a condition that a forward prediction motion vector and a backward prediction motion vector in consecutive frames are small; and

scene change determining means for determining a scene change by making a comparison between the value of the evaluation function, which is calculated by said evaluation function calculating means, and a threshold value.